

DESCRIPTIONS OF NEW QUEENSLAND FISHES.

By **J. DOUGLAS OGILBY.**

*Read before the Royal Society of Queensland,
December 14th, 1907.*

IN the paper which I have the honor of presenting to your Society to night there will be found detailed descriptions of seven undescribed fishes from our coast, namely—1, the “slender dog-shark” (*Scoliodon jordani*) from the snapper banks outside Moreton Bay; 2, Howes’ needle-fish (*Tylosurus impotens*); 3, the “long-beaked gar-fish” (*Hemirhamphus welsbyi*); 4, the “sombre leather-jacket” (*Pseudomonacanthus melanoides*); 5, the “white-dotted grouper” (*Epinephelus raymondi*), from Moreton Bay; 6, the “small-toothed jew-perch” (*Pseudomycterus maccullochi*), from the Logan River; and 7, the “Queensland bellows-fish” (*Macrorhamphosus gallinago*) from the Tweed Heads.

In addition I have the pleasure of adding to the Australian fauna the showy clupeid known as the “lady-fish” (*Albula vulpes*), a fine specimen of which was captured along with sea mullet (*Mugil dobula*) at Southport on the 13th of June, and having fortunately come under the notice of my colleague, Mr. A. Raymond Jones, was purchased by him and presented to the Museum of the Amateur Fishermen’s Association. A few days later a much larger example was taken at the same place, but falling into a dealer’s hands was cut up and sold by the pound.

On the 26th of May, the members of the Brisbane Snapper Club were astonished to catch, on the large hooks and baits in use for snapper and kindred fishes, quite a number of mackerel (*Scomber australasicus*); this is the most northerly point at which this species has been obtained and forms a new record for Queensland. These shoals were

feeding at the bottom and were accompanied by droves of sharks (*Carcharias melanopterus*), numbers of which were captured.

From an examination of several specimens I find that de Vis' *Crossorhinus ornatus* is a valid species closely allied to *Orectolobus japonicus*, Regan. Its correct title is *Orectolobus ornatus*.

SCOLIODON JORDANI sp. nov.

Slender Dog-shark.

Body slender and subfusiform, its width $\frac{7}{8}$ of its depth, which is $10\frac{3}{5}$ in the total length. Head strongly depressed, its depth immediately in front of the gill-slits $1\frac{1}{9}$ in its width, which is $2\frac{1}{4}$ in its length. Length of head $1\frac{3}{8}$ in that of the trunk and $\frac{1}{5}$ of the total length. Snout produced and pointed, its length $2\frac{1}{3}$ in that of the head. Space between the outer angles of the nostrils a little more than that between the inner angle and the tip of the snout, which is $1\frac{5}{7}$ time its distance from the mouth; internasal space $1\frac{1}{10}$ in the width of the mouth, which is but little ($\frac{1}{6}$) more than its ramal length, $\frac{5}{7}$ of the length of the snout, and $3\frac{3}{8}$ in that of the head; tip of mandible rounded, not extending forward to the level of the anterior border of the eye; outer labial groove very short, directed outwards at a right angle to the jaw and $\frac{1}{9}$ of the space between the eye and the mouth; no inner groove. Eye a little nearer to the first gill-slit than to the extremity of the snout, its longitudinal diameter $\frac{1}{8}$ of the length of the head. Interorbital region convex, its width $2\frac{9}{10}$ in the length of the head. Branchial region $1\frac{7}{9}$ time the diameter of the eye; gill-slits narrow, the 5th $\frac{5}{6}$ of the 1st and $\frac{3}{4}$ of the 4th, which is the widest though not so wide as the eye. Length of head and trunk about $1\frac{1}{10}$ in that of the tail. First dorsal fin inserted much nearer to the ventral than to the pectoral, its distance from the tip of the snout rather more than $\frac{1}{3}$ of the total length; anterior border of fin undulose, its outer angle rather sharply rounded; outer border vertical in front, deeply emarginate behind, its posterior angle produced and acutely pointed, not quite reaching to the vertical from the origin of the ventral; length of hinder border rather less than half the base, which is $1\frac{1}{2}$ in the vertical height of the

fin: second dorsal very small, inserted much nearer to the tip of the tail than to the origin of the first dorsal, the length of its base $3\frac{1}{2}$ in that of the first dorsal and nearly $\frac{1}{2}$ of the posterior border. Anal fin inserted much nearer to the caudal than to the ventral and wholly in front of the second dorsal, its posterior border much shorter than that of the second dorsal and a little less than the basal length, which is $2\frac{3}{4}$ in its distance from the precaudal pit. Caudal fin long, its upper border $1\frac{1}{10}$ time the length of the head and $4\frac{1}{2}$ in the total length; terminal border convex, $2\frac{1}{4}$ times the lower border behind the notch, its upper angle acute; descending lobe of lower border well developed and subfalciform, originating slightly in advance of the upper precaudal pit; its anterior border $2\frac{1}{8}$ in the space between its origin and the notch, which is $1\frac{2}{5}$ time its distance from the origin of the anal. Pectoral fin moderate, extending when appressed to below the origin of the first dorsal, its anterior border linear, except at the extreme tip where it is bent downwards, its upper angle pointed; outer border emarginate, the lower angle rounded; posterior border sublinear; width of fin from outer inferior angle to middle of anterior border $\frac{4}{5}$ of its outer border. Ventral fin rather small, its origin $\frac{1}{5}$ nearer to the anal than to the pectoral all the edges linear, the angles obtusely pointed. Dark ashy blue above, gray beneath: pectoral and ventral fins outwardly edged with ash-gray: iris white. (Named for Professor David Starr Jordan, of the Leland Stanford Junior University, in remembrance of his flying visits to Brisbane in May and June, 1907).

Described from an adult male, 860 millimeters in length, obtained on the outer Caloundra Bank in 25 fathoms on the 26th of May, 1907, by Mr. J. Daly, by whom it was presented to the A.F.A.Q. Museum; Cat. No. 664.

BELONIDÆ.

TYLOSURUS IMPOTENS, *sp. nov.*

Howes' Needle-fish.

D. 20; A. 19 or 20; P. 13. Body subfusiform, its depth equaling the distance between the preopercular border and the middle of the eye and from 14 to 15 in the length of the body. Width of head equal to its depth and rather

more than $\frac{1}{5}$ of its length, which is $\frac{1}{3}$ of that of the body. Postorbital portion of head $2\frac{1}{3}$ in the preorbital portion which is $4\frac{3}{4}$ in the length of the body. Jaws moderate and stout, the maxillary not entirely concealed when the mouth is closed; enlarged teeth strong but rather short; tongue ciliate. Upper surface of head with a wide and rather deep median groove; supraciliary and parietal regions partially striated. Diameter of eye $1\frac{1}{3}$ in the interorbital width and $2\frac{1}{2}$ in the postorbital portion of the head. Scales very small; cheeks and anterior half of cephalic groove scaly; opercles naked. Dorsal fin originating above the 4th or 5th anal ray, the height of the 2nd ray equal to its distance from the base of the 11th; posterior rays not produced; the last not reaching to the base of the caudal. Anal fin about as long as the dorsal, its anterior rays $\frac{1}{3}$ longer than those of that fin and reaching to the base of its 14th ray. Caudal fin feebly emarginate, its lower lobe as long as the head behind the middle of the eye; caudal peduncle depressed, as wide as deep, with scarcely a trace of a lateral keel. Pectoral fin long and pointed, equal to the head behind the middle of the eye and $8\frac{1}{2}$ to $9\frac{1}{2}$ in the length of the body. Ventral fin inserted midway between the root of the caudal and the middle of the eye, not so long as the postorbital portion of the head, and $12\frac{2}{3}$ in the body length. Dark green above, sides iridescent silvery, below white; dorsal and caudal fins dull green, with dusky borders; outer half of pectorals blackish; middle ventral rays yellowish: iris silvery, tinged above with pale yellow. (*impotens*, headstrong).

Type in the collection of the Amateur Fishermen's Association of Queensland.

Total length 800 millimeters.

Coast of Southern Queensland.

Howes' Needle-fish differs from *Tylosurus macleayanus* in the larger eye, the incomplete recession of the maxillary, the depth of the cephalic groove, and the shorter posterior dorsal rays; from *T. groeneri* in the depth of the cephalic groove, the smooth tongue, the broader peduncle, and the longer pectoral fin.

Described from two specimens, measuring respectively 540 and 580 millimeters, taken in Moreton Bay, and pre-

sented to the A.F.A.Q. Museum by Mr. Harry A. Howes ;
Cat. No. 537.

The genus *Tylosurus* Cocco, may be conveniently subdivided as follows :—

STENOCAULUS : Body short and deep, strongly compressed, the caudal peduncle without a trace of a lateral keel.

Type—*Belone krefftii*, Günther. (στενός, narrow ; καυλός, a stalk).

TYLOSURUS : Body long, slender, and subcylindrical, the caudal peduncle without or with but a slight trace of a lateral keel. Type—*Tylosurus cantrainii* Cocco. τύλος, callus ; όυρά, a tail).

EURYCAULUS : Body short and broad, the caudal peduncle strongly depressed, with a wide sharp-edged lateral keel. Type—*Belone platyura* Bennett. (εύρύς, wide ; καυλός, a stalk).

EXOCETIDÆ.

HEMIRHAMPHUS WELSBYI *sp. nov.*

Long-beaked Gar-fish.

D. 13 ; A. 12 or 13 ; Sc. 50 to 52-6. Body robust, its width $\frac{3}{4}$ of its depth, which is $8\frac{1}{2}$ in its length. Length of head $2\frac{2}{3}$, of premental portion of the lower jaw, which is $\frac{1}{7}$ longer than the rest of the head, $4\frac{9}{10}$ in that of the body. Premaxillary plate wider than long. Diameter of eye equal to or a little less than the interorbital width and $\frac{2}{3}$ of the postorbital portion of the head. Dorsal and anal fins scaleless, the former originating far in advance of and $1\frac{3}{5}$ time the length of the latter ; last dorsal ray produced, not reaching to the base of the caudal. Caudal fin forked, the middle rays $\frac{5}{8}$ of the diameter of the eye and $4\frac{1}{5}$ in the lower lobe, which is $5\frac{2}{5}$ in the length of the body and $1\frac{1}{5}$ in the premental portion of the lower jaw. Pectoral fin with 12 rays as long as the head behind the angle of the mouth. Ventral inserted midway between the root of the caudal and the middle third of the pectoral, its length $1\frac{3}{8}$ in that of the head from the tip of the premaxillary plate ; inner ray produced, not reaching to the vent. Back dark green ; sides with a conspicuous silvery band, which is widest below the dorsal fin, tapers towards either extremity, and is bordered above by a blue line ; lower parts

pearly white: anterior dorsal rays, outer and middle caudal rays, upper pectoral rays, and middle ventral rays dusky. (Named for Mr. Thomas Welsby, President of the Amateur Fishermen's Association, and an enthusiastic supporter of all scientific work connected with marine zoology).

Type in the collection of the Amateur Fishermen's Association of Queensland; Cat. No. 648.

Length to 400 millimeters.

Coast of Southern Queensland.

Described from eight examples, measuring from 280 to 400 millimeters, obtained in Moreton Bay during June, 1907, and presented to the Museum by Messrs. Thomas Welsby and Joseph Basile. They were very abundant until towards the close of the succeeding month, when they disappeared, and have not since been seen in our shops or market.

MACRORHAMPHOSIDÆ.

MACRORHAMPHOSUS GALLINAGO *sp. nov.*

Queensland Bellows-fish.

D. iv 11; A. 16. Depth of body $3\frac{5}{8}$ in its length, $1\frac{5}{7}$ in the length of the head, and $1\frac{9}{10}$ in the trunk and tail. Length of head $2\frac{1}{8}$ in that of the body. Eye large, its diameter $3\frac{1}{4}$ in the length of the snout and rather more than $\frac{1}{5}$ of that of the head; snout $3\frac{1}{5}$ in the length of the body. Interorbital region convex, its width $\frac{3}{4}$ of the diameter of the eye. First transverse branch of the lateral line with its inferior portion very short and bent strongly forward so as to form an angle of about 15° with the horizontal branch. Second spine of first dorsal fin long, strong, and posteriorly serrated, extending backwards when depressed to the anterior fourth of the caudal fin, its height $3\frac{1}{8}$ in the length of the body and $1\frac{5}{8}$ in that of the trunk and tail; its origin is midway between the base of the middle caudal rays and the posterior border of the eye; soft dorsal fin acutely pointed, its base $\frac{2}{3}$ of its height and $\frac{2}{7}$ of the base of the low anal. Caudal emarginate, $2\frac{1}{8}$ in the length of the snout. Pectoral fin pointed, with 14 rays, the upper the longest, $\frac{1}{2}$ of the snout. Brick red above; cheeks, opercles,

and abdominal region violet bronze ; middle of sides silvery : fins yellow : iris silvery (*gallinago*, a snipe).

Type in the collection of the Amateur Fishermen's Association of Queensland.

Total length 123 millimeters.

Described from a fine specimen obtained at the Tweed Heads by Mr. Dallas Beal, in May, 1907, and kindly presented by him to the Association's Museum.

This species is certainly distinct from Waite's *Macrorhamphosus elevatus*, from which it may be distinguished by the fewer dorsal and anal rays ; the more elongate body, the shorter second dorsal spine, which originates much more anteriorly than in southern specimens, in which—according to Waite's figure—the origin is equidistant from the eye and the *tip* of the middle caudal rays, etc.

FAMILY SERRANIDÆ.

EPINEPHELUS RAYMONDI *sp. nov.*

Dotted Grouper.

D. xi 17 ; A. iii 9 ; Sc. 19-94-32. Depth of body $2\frac{4}{5}$, length of head $2\frac{5}{7}$ in the length of the body. Snout $\frac{1}{7}$ longer than the diameter of the eye, which is $4\frac{2}{7}$ in the length of the head. Interorbital region feebly convex, its width $7\frac{1}{2}$ in the head. Nostrils approximate, the anterior valvular. Lower jaw slightly projecting ; maxillary extending to below the posterior border of the eye, the width of its distal extremity rather more than half the diameter of the eye. Teeth in two series on each side of the mandible ; canines small. Vertical limb of preopercle convex, evenly and finely serrated, the angle rounded and armed superiorly with four stronger serræ, the lower limb entire ; opercular spines equidistant, the lower much further back than the upper ; opercular flap obtusely pointed, its upper border linear. Scales mostly ciliated, those of the head (except the opercle), the nape and a gradually narrowing area of the back from an eye's width behind the opercular flap to the base of the 8th dorsal spine, and the pectoral and thoracic regions deeply imbedded. Gill-rakers 12 on the lower branch of the anterior arch, the longest $\frac{3}{8}$ of the diameter of the eye. Dorsal fin originating a little in advance of the base of the pectoral

(above the base of the middle opercular spine); 4th, 5th and 6th rays highest, $\frac{3}{7}$ of the length of the head and as high as the middle soft rays; last spine shorter than the penultimate, $\frac{3}{10}$ of the head. 2nd anal spine a little higher than the 3rd, $2\frac{6}{7}$ in the length of the head. Caudal fin rounded, $\frac{1}{4}$ of the length of the body. Pectoral rounded, with 17 rays, $\frac{3}{4}$ of the length of the head. Ventral much shorter than the pectoral, reaching to the vent, its length $1\frac{5}{8}$ in that of the head. Pale lilac, each scale of the body and opercles with a central white dot; body with a series of dark blotches which form six irregular bands running obliquely forward from the dorsal profile: soft dorsal and anal fins lilac with a broad purplish basal band; caudal tipped with purple; pectoral with a reddish brown basal spot; ventral marbled light and dark lilac. (Named for my friend and colleague, Mr. Audrey Raymond Jones, without whose hearty cooperation I would have found it well nigh impossible to carry out successfully my multifarious duties to the Association).

Type in the collection of the Amateur Fishermen's Association of Queensland; Cat. No. 678.

Total length 203 millimeters.

Coast of Southern Queensland.

Described from a specimen captured by Mr. C. Dahl at Cape Moreton, in May, 1907, and presented by him to the Association's Museum.

SCIÆNIDÆ.

PSEUDOMYCTERUS *gen. nov.*

Body elliptical, strongly compressed dorsally. Scales rather large, adherent, ciliated, with a wide spinulose submarginal band. Lateral line complete, extending on the proximal half of the caudal fin, the tubes straight with a single pair of predistal opposing tubules, not reaching to the border of the scale. Head rather small, scaly except the anterior half of the snout and preorbitals. Mouth inferior, the snout obtuse, projecting well beyond the upper jaw and bearing on its antero-inferior margin four short broad papilliform processes, which separate and conceal five large pores; maxillary entirely concealed beneath

the preorbital when the mouth is closed; lower jaw included; a large open mental pore. Jaws with a band of minute teeth; no enlarged teeth; vomer, palatines, pterygoids, and tongue toothless. Nostrils separate, the posterior the larger, rounded, semivalvular, and approximate to the orbit. Eyes of moderate size, mostly anterior and supero-lateral. Preorbital deep and entire; vertical limb of preopercle with a narrow, crenulated, membranaceous border; opercle with a short spine. Two dorsal fins, connected at the base, with x, i 29 rays, the spinous portion much shorter and higher than the soft, its rays flexible: anal fin short with ii 7 rays, the second spinous ray strong; vertical fins with a low basal scaly sheath, and a series of small scales behind each soft ray: caudal fin large and cuneate, mostly scaly: pectoral fin well developed, asymmetrical, with 18 rays, the upper middle ones the longest: ventrals inserted behind the base of the pectorals, close together, with i 5 rays, the first soft ray the longest and terminating in a filament. Gill-openings wide; gill-membranes separate, free from the isthmus; seven branchiostegals; pseudobranchiæ well developed; gills four, a slit behind the fourth; gill-rakers short and spinulose; first, second, and fourth upper pharyngeals armed with small sharp teeth, the inner row of which is somewhat enlarged; third pharyngeal enlarged, with strong conical teeth; lower pharyngeals separate, with five series of teeth, the inner strong, the others gradually diminishing in size. Air bladder large, without lateral fringes, expanded in front, pointed and extending well beyond the vent behind. Stomach siphonal; seven short pyloric appendages; intestine with two convolutions. ($\psi\acute{\epsilon}\nu\delta\omicron\varsigma$, false; $\mu\nu\kappa\tau\eta\rho$, nostril; the anterior nasal flaps and pores having the appearance of supplementary nostrils).

Coast of Queensland.

In the feebleness of its dentition this genus differs from all the other Australian sciaenids, and approaches the American genus *Leiostomus*,* from which, however, it may be distinguished by the permanency of the mandibular teeth, the shorter anal fin, the cuneate caudal, and the acute lower pharyngeal teeth.

* Lacépède, Poiss., iv., p. 439, 1802.

PSEUDOMYCTERUS MACCULLOCHI *sp. nov.**Small-toothed Jew-fish.*

D. x, i 29; A. ii 7. Sc. 7—58—14; L. l. 46. Dorsal profile much more arched than the ventral; depth of body $3\frac{1}{4}$ in its length. Upper profile of head obliquely linear, its length $3\frac{1}{2}$ in that of the body. Snout obtuse and overhanging, rounded above, $\frac{1}{3}$ more than the diameter of the eye, which is $4\frac{1}{3}$ in the length of the head. Interorbital region convex, its width $3\frac{2}{5}$ in the head. Maxillary extending to below the middle of the eye, the width of its distal extremity $2\frac{1}{2}$ in the diameter of the eye. Depth of preorbital $1\frac{2}{7}$ in the eye. Second dorsal spine highest, $1\frac{2}{5}$ in the length of the head, and $1\frac{1}{2}$ time the height of the soft dorsal. Anal fin originating below the 13th dorsal ray, its 2nd spine of moderate length, $1\frac{1}{5}$ time that of the snout, and $1\frac{1}{2}$ in the 1st ray, which is much lower than the spinous dorsal. Caudal fin $3\frac{4}{5}$ in the length of the body; least depth of peduncle about 3 in the depth of the body and equaling the 2nd anal spine. Pectoral fin with 18 rays, reaching to the 12th scale of the lateral line, and $4\frac{1}{5}$ in the length of the body. Ventral fin not quite so long as the pectoral, extending midway between its origin and the base of the 4th anal ray. Gill-rakers 5 + 10, the longest about $\frac{1}{3}$ of the diameter of the eye. Silvery, everywhere so clouded with densely packed brown spots as quite to obscure the ground-color: vertical fins darker than the body, except the base of the spinous dorsal, which is dull blue. (Named for Allan Riverston McCulloch, a rising young Australian biologist).

Type in the collection of the Amateur Fishermen's Association of Queensland.

Total length 285 millimeters.

Described from a specimen caught in September last in the Logan River by Mr. C. Harris, and presented by him to the Association's Museum.

On being shown the fish, Mr. W. Nicklin states that to the best of his belief it is the same species as was common in the Brisbane River many years ago, and suddenly disappeared. The same habit has also been noticed in the now common "perch" of our fishermen, which, however, is a true *Sciæna*.

MONACANTHIDÆ.

PSEUDOMONACANTHUS MELANOIDES *sp. nov.**Sombre Leather-jacket.*

D. 34; A. 29. Skin velvety, without distinct scales. Depth of body $\frac{1}{2}$, length of head (to upper angle of the gill-opening) $\frac{1}{3}$ of the length of the body. Snout with the upper profile concave, its length $3\frac{3}{4}$ in that of the body and more than thrice the diameter of the eye, which is $\frac{1}{4}$ of the length of the head, $\frac{5}{6}$ of the interorbital width, and is situated midway between the base of the dorsal spine and the upper angle of the gill-opening, and also between the tip of the snout and the first dorsal ray. Gill-opening below the posterior half of the eye, extending obliquely backward from in front of the upper angle of the pectoral, its length rather less than the diameter of the eye and equal to its distance from the eye. Dorsal spine originating above the middle of the eye, its height equaling the length of the snout, and rather less than its distance from the soft dorsal, which originates somewhat nearer to the tip of the snout than to that of the caudal fin: soft dorsal low and rounded, lower than the anal, the highest rays of which are $\frac{3}{10}$ of the length of the head; the anal originates well behind but is conterminous with the soft dorsal. Caudal rounded, $5\frac{1}{5}$ in the length of the body; caudal peduncle strongly compressed, its least depth $\frac{1}{2}$ of the length of the snout. Pectoral short, with 12 rays, rather more than $\frac{1}{2}$ the snout. Black, with a broad silvery band across the chin, midway between the tip of the mandible and the pectoral fin: soft dorsal, anal, and pectoral fins hyaline; caudal blackish (*melas*—from *μέλας*, gen. *μελανος*, black—an allied species; *εἶδος*, resemblance).

Type in the collection of the Amateur Fishermen's Association of Queensland.

Total length 71 millimeters.

Coast of Southern Queensland.

Described from a specimen obtained at Cape Moreton, in May 1907, by Mr. James Palmer of Bulwer, to whom the Association is indebted for it.

Note on some fishes which fell during the thunder-storm on the 7th instant.—On the 5th March, 1906* I had the privilege of reading before this Society a note on the phenomena commonly known as “showers of fishes.” In that note I showed that to my own knowledge two at least of our common creek forms were liable to be victims to these caprices of the elements, these being the “carp gudgeon” (*Carassiops compressus*) and the “firetail” (*Austrogobio galii*). I have now the pleasure of adding to these a third species, namely, the “trout gudgeon” (*Krefftius adpersus*). On the morning of Monday, October 7th, after the phenomenal hail- and thunder- storm of the preceding night, Mr. W. Adams, of Kelvin Grove, noticed numbers of these fishes lying dead in Victoria Park, which could have come to their untimely end by no other means. One circumstance, however, tends to exalt the present occurrence above the two which I have previously recorded, for whereas in those the specimens collected were small, measuring less than an inch and a half, and weighing but a few grains, in this case the larger of the pair secured by Mr. Adams, and kindly forwarded by him to the Amateur Fishermen’s Association Museum, has a total length of 98 millimeters (close on 4 inches), and weighs 125 grains, or almost exactly half an ounce. That fishes of such a size and bulk could be whirled up into the air and carried along for a considerable distance shows the exceptionally violent character of that particular storm.

* Proc. Roy. Soc. Queensl., xx, 1906, p. 28.